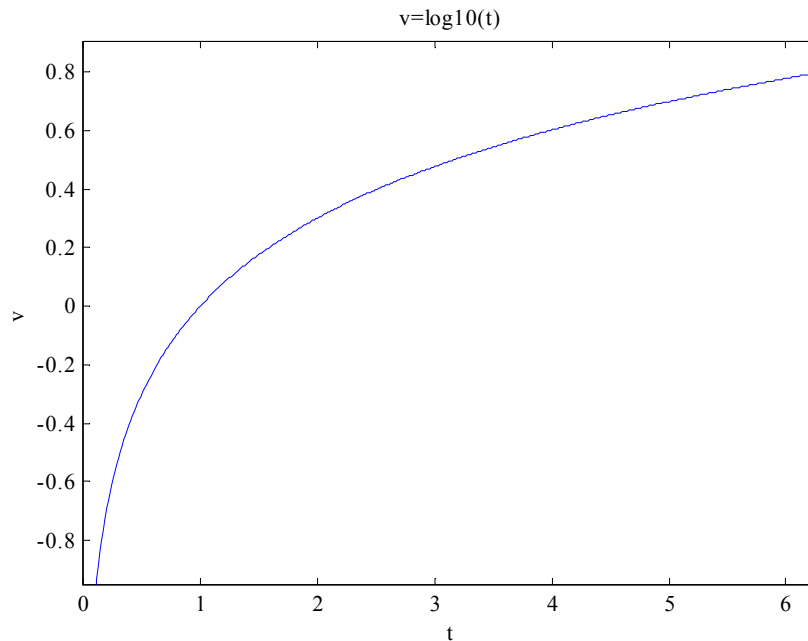
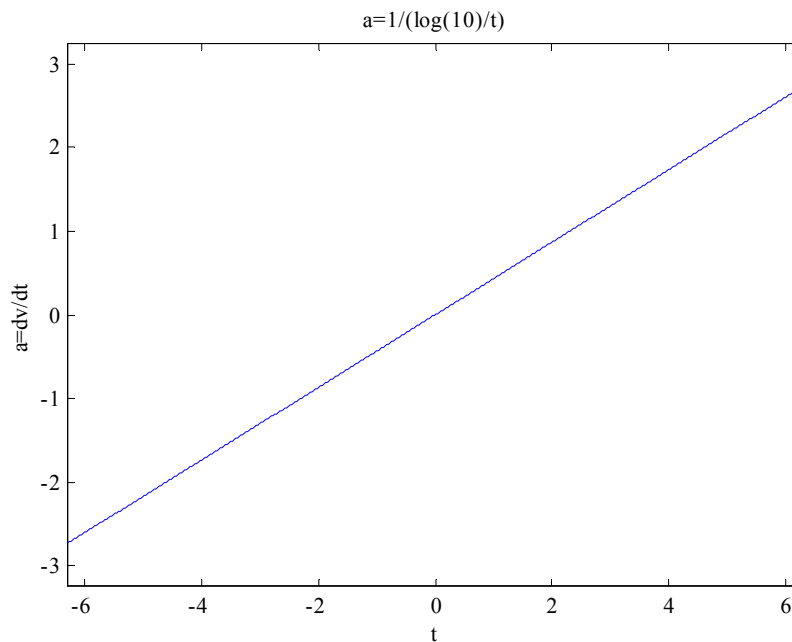


Here's a crack at an effort to explain the difference we saw when comparing the first few minutes of real-time and off-line leaky integrator outputs. First, since we are integrating, I figured I would start with analytical expression for what the off-line looked like, which was something like the initial portion of this curve (our velocity plot):



So if integration produced the output above, in order to have an analytical look at what input would give this result, we must differentiate the logarithmic expression shown in the plot's title above. I could not recall exactly how to do this, so I checked around a few places and found that the derivative of the expression above (first derivative of velocity with respect to time is acceleration) is shown in the plot's title below:



This is precisely the ramping we saw when I lowpass filtered the SAMS-FF acceleration data.